

Computerized Warning System Replaces Word of Mouth

Full Mitigation Best Practice Story

Jackson County, Texas

Jackson County, TX – In September 2005, the threat of Hurricane Rita had local officials in Jackson County Texas depending largely on "word of mouth" to warn area residents of the impending storm. Lessons learned from this experience led officials to seek a better and faster way to communicate emergency information. The county then invested in an emergency automated telephone notification system.



Edna Chief of Police Clinton Woolridge said that at an after-action meeting following Hurricane Rita, officials talked about the lack of radio and television stations in the county. "We had no way of telling people to tune in to a local station to get emergency information," he said. The decision was made to get an emergency telephone notification system for getting out evacuation messages.

The county received a \$63,750 grant from the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) to purchase the warning system. HMGP pays up to 75 percent on approved projects that prevent or reduce damage from storms and other natural hazards. Administered by the State, these grants are made available for both public and private projects. The 25 percent match came from a private source.

In the event of an emergency, the 911 dispatcher can identify the affected neighborhood or region of the county, record a message describing the situation, and recommend the protective action residents should take. The computerized system can then call all listed telephone numbers in that geographic area and deliver the recorded message. Residents who have listed their telephone numbers are able to receive messages regarding evacuations, severe weather, flash floods, hazardous material releases, shelter-in-place notifications, dam or levee breaks, bomb threats, abductions, hostage situations, and prison escapes.

Lori McLennan, Edna Police Department office manager and 911 operator, said the system was used for hurricanes Gustav and Ike, a chemical spill at Formosa, and a mock drill at an elementary school.

The system is set up to provide county-wide alerts as well as specific-area alerts according to five geographic zones. "Depending on where the emergency is, I can launch a zone-specific message or a county-wide message," McLennan said.

"For Hurricane Ike, we launched an initial session to warn residents in the Lavaca Bay area of a voluntary evacuation. As the weather condition worsened, we launched it for a mandatory evacuation for the entire county," she said, adding that the task was completed in less than two hours.

While the length of time required to transmit messages varies according to the number of phone lines activated, validating the success of the transmitted message is almost immediate. The computer generates a report on how many people picked up the phone to listen to the message, how many answering machines picked up, and the number of unheard messages.

"The system works better than 'word of mouth' because it provides an accurate message," Woolridge added. "When the message is delivered by 'word of mouth' by the time it gets around to the third person its context has changed considerably."

McClellan said many people in the community have told her they appreciate the system.

Activity/Project Location

Geographical Area: Single County in a State

FEMA Region: Region VI

State: Texas

County: Jackson County

City/Community: Edna

Key Activity/Project Information

Sector: Public

Severe Storm; Flooding; Hurricane/Tropical Storm; Fire; Terrorism;

Hazard Type: Chemical/Biological

Activity/Project Type: Warning Systems

Activity/Project Start Date: 11/2005
Activity/Project End Date: 04/2006

Funding Source: Hazard Mitigation Grant Program (HMGP)

Funding Recipient: Critical Facility - Police/Fire

Application/Project Number: 0041

Activity/Project Economic Analysis

Cost: \$85,000.00 (Actual)

Non FEMA Cost: 21250

Activity/Project Disaster Information

Mitigation Resulted From Federal

Disaster? Yes

Federal Disaster #: 1606, 09/24/2005

Federal Disaster Year: 2005

Value Tested By Disaster? Yes

Tested By Federal Disaster #: 1791, 09/13/2008

Repetitive Loss Property? No

Reference URLs

Reference URL 1: http://www.reverse911.com

Main Points

No Main Points were entered.



Photo of the introductory screen for the Reverse 911 Warning System



The Reverse 911 Warning System gives a summary report of each callout session